❑ IMAGEWRITER II

Pin-outs

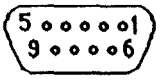
Pin No.	Signal Name	Signal Description
1	DTR	Data Terminal Ready (output)
2	DSR	Data Set Ready (input)
3	TXD-	Transmit Data
4	SG	Signal Ground
5	RXD-	Receive Data
6	TXD+	Balanced transmit +
7	NC	No connection
8	RXD+	Balanced receive +
(Shield)	PG	Protective Ground

Connector Type: Mini DIN-8 Male

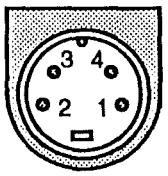
Switch 1

	1	2	3	4	5	6	7	8
CHARACTER SET								
American	**OFF**	**OFF**	**OFF**					
Italian	ON	OFF	OFF					
Danish	OFF	ON	OFF					
British	ON	ON	OFF					
German	OFF	OFF	ON					
Swedish	ON	OFF	ON					
French	OFF	ON	ON					
Spanish	ON	ON	ON					
FORM LENGTH								
11 inches				**OFF**				
12 inches				ON				
PERFORATION SKIP								
Disabled					**OFF**			
Enabled					ON			
CHARACTERS PER INCH								
10						OFF	OFF	
12						**ON**	**OFF**	
17						OFF	ON	
Proportional						ON	ON	
AUTO LF ON CR								
Disabled								**OFF**
Enabled								ON

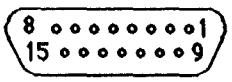
❑ CONNECTOR SPECIFICATIONS



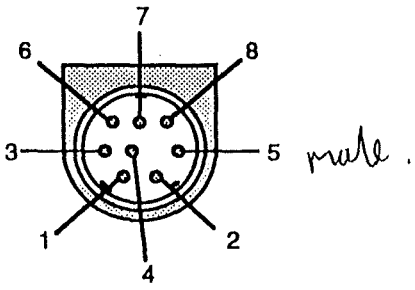
DE-9



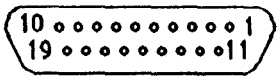
MINI DIN-4



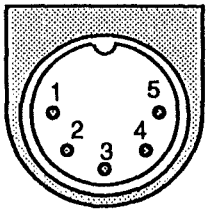
DA-15



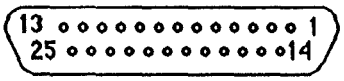
MINI DIN-8



DB-19



DIN-5



DB-25

Command Summary

This appendix is a complete collection of all Apple Imagewriter control codes and DIP switch settings.

Note: Before using the following control codes, refer to Appendix G for firmware modifications applicable to your Apple Imagewriter.

Printer Standard Instructions

The following are the standard instructions, or default settings, for various functions of the Apple Imagewriter:

Function	Standard Instructions
Character pitch	Elite
Proportional character spacing	1 dot width
Underlining	No underlining
Boldface printing	No boldface
Headline type	No headlines
Direction of type head motion	Bidirectional
Line feed pitch	6 lines per inch
Optional line feed function	Disabled
Line feed direction	Forward
Left margin	Character position 0
Horizontal tabs	Cleared
Vertical tabs	B tab every 6 lines

General Control Codes

Code	Decimal	Hex	Effect
ESC n	27 110	$1B $6E	Extended (9 characters per inch)
ESC N	27 78	$1B $4E	Pica (10 characters per inch)
ESC E	27 69	$1B $45	Elite (12 characters per inch)
ESC p	27 112	$1B $70	Pica proportional
ESC P	27 80	$1B $50	Elite proportional
ESC e	27 101	$1B $65	Semicondensed (13.4 characters per inch)
ESC q	27 113	$1B $71	Condensed (15 characters per inch)
ESC Q	27 81	$1B $51	Ultracondensed (17 characters per inch)
ESC _ n	27 d	$1B h	Sets n dots between proportional characters (n = 1 to 6)
ESC s _ n	27 115 d	$1B $73 h	Sets spacing between all characters in proportional mode to n dots (n = 0 to 9)
ESC R nnn c	27 82 ddd d	$1B $52 hhh h	Prints nnn repetitions of character c
CTL-H c	8 c	$08 h	Backspaces one character and prints the character c
ESC X	27 88	$1B $58	Starts underlining text
ESC Y	27 89	$1B $59	Stops underlining text
ESC !	27 33	$1B $21	Starts boldface printing

Code	Decimal	Hex	Effect
ESC "	27 34	$1B $22	Ends boldface printing
CTL-N	14	$0E	Begins headline mode
CTL-O	15	$0F	Ends headline mode
ESC >	27 62	$1B $3E	Left-to-right printing only
ESC <	27 60	$1B $3C	Bidirectional printing
ESC A	27 65	$1B $41	6 lines per inch
ESC B	27 66	$1B $42	8 lines per inch
ESC I 1	27 108 49	$1B $6C $31	Enables optional line feed function
ESC I 0	27 108 48	$1B $6C $30	Disables optional line feed function
ESC T nn	27 84 dd	$1B $54 hh	Distance between lines to be nn/144 inch (nn = 01 to 99)
ESC f	27 102	$1B $66	Forward (normal) line feeding
ESC r	27 114	$1B $72	Reverse line feeding
CTL-_ n	31 d	$1F h	Feeds n lines of blank paper (n=1,2,3,4,5,6,7,8,9,:,;,<,=,>,?)
ESC L nnn	27 76 ddd	$1B $4C hhh	Sets left margin to position nnn
CTL-L	12	$0C	Feeds paper to next top of form
ESC v	27 118	$1B $76	Sets TOF to current position
ESC O	27 79	$1B $4F	Paper error detector off
ESC o	27 111	$1B $6F	Paper error detector on
ESC Z@ CTL-@	27 90 64 0	$1B $5A $40 $0	End-of-line at CR only
ESC D@ CTL-@	27 68 64 0	$1B $44 $40 $0	End-of-line at CR, VT, FF, HT, CONTROL-_
CTL-X	24	$18	Cancels all unprinted text
ESC Z _CTL-@	27 90 32 0	$1B $5A $20 $0	No line feed after auto-print (_ = space character)
ESCD _CTL-@_	27 68 32 0	$1B $44 $20 $0	Line feed after auto-print (_ = space character)
ESC D CTL-@_	27 68 0 32	$1B $44 $00 $20	Ignores eighth bit of data byte
ESC Z CTL-@_ _	27 90 0 32	$1B $5A $00 $20	Recognizes eighth bit of data byte
ESC c	27 99	$1B $63	Restores standard instructions (Software Reset)

Tabbing Control Codes

Code	Decimal	Hex	Effect
ESC (a,b,——n.	27 40 d1, d2,--	$1B $28 h1, h2,--	Sets horizontal tab line
ESC u	27 117	$1B $75	Sets horizontal tab in addition to those tabs already set (only one additional tab can be set in any one operation)
ESC) a,b,——n.	27 41 d1, d2,--	$1B $29 h1, h2,--	Clears selected horizontal tabs
ESC 0	27 48	$1B $30	Clears all tabs
CTL-I	9	$09	Goes to next tab
CTL -] A@	29 65 64	$1D $41 $40	Sets starting top of form (TOF)
C@	67 64	$43 $40	Sets bottom of form (BOF)
A@ CTL-^	65 64 30	$41 $40 $1E	Sets TOF of next form
CTL-_ B	31 66	$1F $42	Drops to next tab B
CTL-_ C	31 67	$1F $43	Drops to next tab C
CTL-_ D	31 68	$1F $44	Drops to next tab D
CTL-_ E	31 69	$1F $45	Drops to next tab E
CTL-_ F	31 70	$1F $46	Drops to next tab F
CTL-_ A	31 65	$1F $41	Drops to next BOF or TOF
CTL-L	12	$0C	Drops to next TOF
GS 0	29 48	$1D $30	Sets vertical tabbing to power-on status, and sets TOF to current paper position

Custom Character Control Codes

Code	Decimal	Hex	Effect
ESC -	27 45	$1B $2D	Maximum width will be 8 dots
ESC +	27 43	$1B $2B	Maximum width will be 16 dots
ESC I	27 73	$1B $49	Starts loading new character(s)
CTL-D	4	$04	Ends new character(s) loading
A.....P	65...80	$41...$50	Width code when using top 8 wires (A = 1 ... P = 16)
a.....p	97..112	$61...$70	Width code when using bottom 8 wires (a = 1 ... p = 16)
ESC '	27 39	$1B $27	Switches to custom character font
ESC *	27 42	$1B $2A	Switches to custom character font (high ASCII values)
ESC $	27 36	$1B $24	Switches back to normal font

Graphics Control Codes

Code	Decimal	Hex	Effect
ESC G nnnn	27 71 dddd	$1B $47 hhhh	Prints graphics columns corresponding to the following nnnn data bytes
ESC S nnnn	27 83 dddd	$1B $53 hhhh	Same as ESCAPE G
ESC g nnn	27 103 ddd	$1B $67 hhh	Prints line corresponding to the following nnn x 8 data bytes
ESC V nnnn c	27 86 dddd d	$1B $56 hhhh h	Prints nnnn repetitions of the dot column specified by c
ESC F nnnn	27 70 dddd	$1B $46 hhhh	Places succeeding printing nnnn dot positions from left margin

DIP Switch Settings

The normal position of DIP switches SW1 and SW2 on the Imagewriter are as indicated in boldfaced capital letters.

SW1-1	SW1-2	SW1-3	
OPEN	**OPEN**	**OPEN**	**American**
Closed	Closed	Open	British
Open	Open	Closed	German
Open	Closed	Closed	French
Closed	Open	Closed	Swedish
Closed	Open	Open	Italian
Closed	Closed	Closed	Spanish
Open	Closed	Open	American

SW1-4	
OPEN	**Page Length: 66 lines**
Closed	Page Length: 72 lines

SW1-5	
CLOSED	**Ignores 8th data bit**
Open	Recognizes 8th data bit

SW1-6	SW1-7	
Open	Open	Pica (10 chars. per inch)
CLOSED	**OPEN**	**Elite (12 chars. per inch)**
Open	Closed	Ultracondensed (17 chars. per inch)
Closed	Closed	Elite proportional (144 dots per inch)

SW1-8	
Closed	Adds line feed after every carriage return
OPEN	**No line feed after carriage return**

SW2-1	SW2-2	
Open	Open	300 Baud
Closed	Open	1200 Baud
Open	Closed	2400 Baud
CLOSED	**CLOSED**	**9600 Baud**

SW2-3	
OPEN	**Data terminal ready**
Closed	XON/XOFF

SW2-4	
OPEN	**(not used)**

ASCII		Low ASCII Dec	Hex	76543210	High ASCII Dec	Hex	76543210
CONTROL-R	DC2	18	12	00010010	146	92	10010010
CONTROL-S	DC3	19	13	00010011	147	93	10010011
CONTROL-T	DC4	20	14	00010100	148	94	10010100
CONTROL-U	NAK	21	15	00010101	149	95	10010101
CONTROL-V	SYN	22	16	00010110	150	96	10010110
CONTROL-W	ETB	23	17	00010111	151	97	10010111
CONTROL-X	CAN	24	18	00011000	152	98	10011000
CONTROL-Y	EM	25	19	00011001	153	99	10011001
CONTROL-Z	SUB	26	1A	00011010	154	9A	10011010
	ESC	27	1B	00011011	155	9B	10011011
	FS	28	1C	00011100	156	9C	10011100
	GS	29	1D	00011101	157	9D	10011101
	RS	30	1E	00011110	158	9E	10011110
	US	31	1F	00011111	159	9F	10011111
	SP	32	20	00100000	160	A0	10100000
	!	33	21	00100001	161	A1	10100001
	"	34	22	00100010	162	A2	10100010
	#	35	23	00100011	163	A3	10100011
	$	36	24	00100100	164	A4	10100100
	%	37	25	00100101	165	A5	10100101
	&	38	26	00100110	166	A6	10100110
	'	39	27	00100111	167	A7	10100111
	(	40	28	00101000	168	A8	10101000
	)	41	29	00101001	169	A9	10101001
	*	42	2A	00101010	170	AA	10101010
	+	43	2B	00101011	171	AB	10101011
	,	44	2C	00101100	172	AC	10101100
	-	45	2D	00101101	173	AD	10101101
	.	46	2E	00101110	174	AE	10101110
	/	47	2F	00101111	175	AF	10101111
	0	48	30	00110000	176	B0	10110000
	1	49	31	00110001	177	B1	10110001
	2	50	32	00110010	178	B2	10110010
	3	51	33	00110011	179	B3	10110011
	4	52	34	00110100	180	B4	10110100
	5	53	35	00110101	181	B5	10110101
	6	54	36	00110110	182	B6	10110110
	7	55	37	00110111	183	B7	10110111
	8	56	38	00111000	184	B8	10111000
	9	57	39	00111001	185	B9	10111001
	:	58	3A	00111010	186	BA	10111010
	;	59	3B	00111011	187	BB	10111011
	<	60	3C	00111100	188	BC	10111100
	=	61	3D	00111101	189	BD	10111101
	>	62	3E	00111110	190	BE	10111110
	?	63	3F	00111111	191	BF	10111111
	@	64	40	01000000	192	C0	11000000
	A	65	41	01000001	193	C1	11000001
	B	66	42	01000010	194	C2	11000010
	C	67	43	01000011	195	C3	11000011
	D	68	44	01000100	196	C4	11000100
	E	69	45	01000101	197	C5	11000101
	F	70	46	01000110	198	C6	11000110
	G	71	47	01000111	199	C7	11000111
	H	72	48	01001000	200	C8	11001000
	I	73	49	01001001	201	C9	11001001

ASCII	Low ASCII Dec	Hex	76543210	High ASCII Dec	Hex	76543210
J	74	4A	01001010	202	CA	11001010
K	75	4B	01001011	203	CB	11001011
L	76	4C	01001100	204	CC	11001100
M	77	4D	01001101	205	CD	11001101
N	78	4E	01001110	206	CE	11001110
O	79	4F	01001111	207	CF	11001111
P	80	50	01010000	208	D0	11010000
Q	81	51	01010001	209	D1	11010001
R	82	52	01010010	210	D2	11010010
S	83	53	01010011	211	D3	11010011
T	84	54	01010100	212	D4	11010100
U	85	55	01010101	213	D5	11010101
V	86	56	01010110	214	D6	11010110
W	87	57	01010111	215	D7	11010111
X	88	58	01011000	216	D8	11011000
Y	89	59	01011001	217	D9	11011001
Z	90	5A	01011010	218	DA	11011010
[	91	5B	01011011	219	DB	11011011
\	92	5C	01011100	220	DC	11011100
]	93	5D	01011101	221	DD	11011101
^	94	5E	01011110	222	DE	11011110
_	95	5F	01011111	223	DF	11011110
`	96	60	01100000	224	E0	11100000
a	97	61	01100001	225	E1	11100001
b	98	62	01100010	226	E2	11100010
c	99	63	01100011	227	E3	11100011
d	100	64	01100100	228	E4	11100100
e	101	65	01100101	229	E5	11100101
f	102	66	01100110	230	E6	11100110
g	103	67	01100111	231	E7	11100111
h	104	68	01101000	232	E8	11101000
i	105	69	01101001	233	E9	11101001
j	106	6A	01101010	234	EA	11101010
k	107	6B	01101011	235	EB	11101011
l	108	6C	01101100	236	EC	11101100
m	109	6D	01101101	237	ED	11101101
n	110	6E	01101110	238	EE	11101110
o	111	6F	01101111	239	EF	11101111
p	112	70	01110000	240	F0	11110000
q	113	71	01110001	241	F1	11110001
r	114	72	01110010	242	F2	11110010
s	115	73	01110011	243	F3	11110011
t	116	74	01110100	244	F4	11110100
u	117	75	01110101	245	F5	11110101
v	118	76	01110110	246	F6	11110110
w	119	77	01110111	247	F7	11110111
x	120	78	01111000	248	F8	11111000
y	121	79	01111001	249	F9	11111001
z	122	7A	01111010	250	FA	11111010
{	123	7B	01111011	251	FB	11111011
|	124	7C	01111100	252	FC	11111100
}	125	7D	01111101	253	FD	11111101
~	126	7E	01111110	254	FE	11111110
DEL	127	7F	01111111	255	FF	11111111

Appendix E

Printer Specifications

Print Method:	Dot matrix, logic seek (line by line)
Printing Speed:	At 10 characters per inch: 120 characters per second 72 lines per minute
Character Format:	Standard characters: Up to 7 dots wide by 8 dots high Custom (down-loaded) characters: Up to 16 dots wide by 8 dots high
Standard Characters:	96 ASCII (alphanumeric and symbols) 25 European language characters
Vertical Dot Spacing:	1/72 of an inch
Line Length:	8 inches maximum

Horizontal Pitches:

	Characters per Inch	Characters per Line	Dots per Inch (Approx.)
	17	136	136
	15	120	120
	13.4	107	107
	12	96	96
	10	80	80
	9	72	72
Headline	8.5	68	136
	7.5	60	120
	6.7	53.5	107
	6	48	96
	5	40	80
	4.5	36	72
Graphics	variable	variable	160
	variable	variable	144

Paper Feed Direction:	Forward and reverse
Line Spacing:	1/144 to 99/144 of an inch, selectable in increments of 1/144 of an inch
Line Feed Method:	Stepper motor drive
Line Feed Speed:	Maximum 10 per second at 6 lines per inch

Paper Width:	4 to 10 inches
Paper Thickness:	0.05 - 0.28 millimeter (0.002 - 0.011 inch) Original + 3 copies maximum
Paper Feed Method:	Selectable, friction or sprocket/pin feed
Paper Types:	Single sheets Roll paper Fanfold sprocketed paper (hole centers 3.5 - 9.5 inches)
Paper Entry:	Top rear of printer
Ribbon:	Cassette containing inked fabric ribbon (black recommended), 13 millimeters wide by 13,000 millimeters long, automatically reversing
Power Options:	115 volts AC ± 10%, 60 hertz 100 volts AC ± 10%, 50/60 hertz 220 volts AC ± 10%, 50 hertz 240 volts AC ± 10%, 50 hertz
Power Consumption:	Operating: 180 watts maximum Standby: 16 watts maximum
Data Interface:	8-bit serial (see Appendix F)
Weight:	8.5 kilograms (18.75 pounds)

Dimensions:	**Width**	**Depth**	**Height**
	398	285	125 millimeters
	15.7	11.3	5.3 inches

Ambient Temperature:	
Operating	5 to 40 degrees Celsius (41 to 104 degrees Fahrenheit)
Storage	−25 to +60 degrees Celsius (−13 to +140 degrees Fahrenheit)
Maximum Humidity:	
Operating	85% relative humidity, noncondensing
Storage	90% relative humidity, noncondensing

Appendix G

Firmware Modifications

This appendix lists firmware modifications that are referenced throughout this manual and are implemented on Apple Imagewriters with serial numbers 216001 and above.

Note: Before attempting to use any of the following control codes, you should check the serial number of your Imagewriter to see if the code is available for use.

General Control Code Modifications

Code	Decimal	Hex	Effect
ESCAPE _n	27 n	$1B $n	Sets n dots between proportional characters (n = 1 to 6)
ESCAPE s _n	27 115 n	$1B 73 n	Sets spacing between all characters in proportional mode to n dots (n = 0 to 9)
ESCAPE I 1	27 108 49	$1B $6C $31	Enables optional line feed function
ESCAPE I Ø	27 108 48	$1B $6C $3Ø	Disables optional line feed function
ESCAPE v	27 118	$1B $76	Sets TOF to current position

Tabbing Control Code Modifications

Code	Decimal	Hex	Effect
ESCAPE u	27 117	$1B $75	Sets horizontal tab in addition to those tabs already set (only one additional tab can be set in any one operation)
GS Ø	29 48	$1D $3Ø	Sets vertical tabbing to power-on status and TOF to current paper position

Apple® Imagewriter Character Set

ASCII	Dec	Hex	ASCII	Dec	Hex	ASCII	Dec	Hex	ASCII	Dec	Hex
NUL	00	$ 00	SP	32	$ 20	②*	64	$ 40	⑦*	96	$ 60
SOH	01	$ 01	!	33	$ 21	A	65	$ 41	a	97	$ 61
STX	02	$ 02	"	34	$ 22	B	66	$ 42	b	98	$ 62
ETX	03	$ 03	⓪*	35	$ 23	C	67	$ 43	c	99	$ 63
EOT	04	$ 04	①*	36	$ 24	D	68	$ 44	d	100	$ 64
ENQ	05	$ 05	%	37	$ 25	E	69	$ 45	e	101	$ 65
ACK	06	$ 06	&	38	$ 26	F	70	$ 46	f	102	$ 66
BEL	07	$ 07	'	39	$ 27	G	71	$ 47	g	103	$ 67
BS	08	$ 08	(	40	$ 28	H	72	$ 48	h	104	$ 68
HT	09	$ 09	)	41	$ 29	I	73	$ 49	i	105	$ 69
LF	10	$ 0A	*	42	$ 2A	J	74	$ 4A	j	106	$ 6A
VT	11	$ 0B	+	43	$ 2B	K	75	$ 4B	k	107	$ 6B
FF	12	$ 0C	,	44	$ 2C	L	76	$ 4C	l	108	$ 6C
CR	13	$ 0D	-	45	$ 2D	M	77	$ 4D	m	109	$ 6D
SO	14	$ 0E	.	46	$ 2E	N	78	$ 4E	n	110	$ 6E
SI	15	$ 0F	/	47	$ 2F	O	79	$ 4F	o	111	$ 6F
DLE	16	$ 10	0	48	$ 30	P	80	$ 50	p	112	$ 70
DC1	17	$ 11	1	49	$ 31	Q	81	$ 51	q	113	$ 71
DC2	18	$ 12	2	50	$ 32	R	82	$ 52	r	114	$ 72
DC3	19	$ 13	3	51	$ 33	S	83	$ 53	s	115	$ 73
DC4	20	$ 14	4	52	$ 34	T	84	$ 54	t	116	$ 74
NAK	21	$ 15	5	53	$ 35	U	85	$ 55	u	117	$ 75
SYN	22	$ 16	6	54	$ 36	V	86	$ 56	v	118	$ 76
ETB	23	$ 17	7	55	$ 37	W	87	$ 57	w	119	$ 77
CAN	24	$ 18	8	56	$ 38	X	88	$ 58	x	120	$ 78
EM	25	$ 19	9	57	$ 39	Y	89	$ 59	y	121	$ 79
SUB	26	$ 1A	:	58	$ 3A	Z	90	$ 5A	z	122	$ 7A
ESC	27	$ 1B	;	59	$ 3B	③*	91	$ 5B	⑧*	123	$ 7B
FS	28	$ 1C	<	60	$ 3C	④*	92	$ 5C	⑨*	124	$ 7C
GS	29	$ 1D	=	61	$ 3D	⑤*	93	$ 5D	⑩*	125	$ 7D
RS	30	$ 1E	>	62	$ 3E	⑥*	94	$ 5E	⑪*	126	$ 7E
US	31	$ 1F	?	63	$ 3F	-	95	$ 5F	DEL	127	$ 7F

Note: The reference symbol ◯* refers to the Apple Imagewriter Extended Character Set table below for Alternate (National Languages):

Apple Imagewriter Alternate Character Set (For National Languages)

Reference Number	0	1	2	3	4	5	6	7	8	9	10	11
Hexadecimal	$ 23	$ 24	$ 40	$ 5B	$ 5C	$ 5D	$ 5E	$ 60	$ 7B	$ 7C	$ 7D	$ 7E
American	#	$	@	[	\	]	^	`	{	|	}	~
British	£	$	@	[	\	]	^	`	{	|	}	~
German	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
French	£	$	à	°	ç	§	^	`	é	ù	è	¨
Swedish	#	$	@	Ä	Ö	Å	^	`	ä	ö	å	~
Italian	£	$	§	°	ç	é	^	ù	à	ò	è	ì
Spanish	£	$	§	¡	Ñ	¿	^	`	°	ñ	ç	~

The normal position of DIP switches SW1 and SW2 on the Imagewriter are as indicated in boldfaced capital letters.

SW1-1	SW1-2	SW1-3	
OPEN	**OPEN**	**OPEN**	**American**
Closed	Closed	Open	British
Open	Open	Closed	German
Open	Closed	Closed	French
Closed	Open	Closed	Swedish
Closed	Open	Open	Italian
Closed	Closed	Closed	Spanish
Open	Closed	Open	American

SW1-4	
OPEN	**Page Length: 66 lines**
Closed	Page Length: 72 lines

SW1-5	
CLOSED	**Ignores 8th data bit**
Open	Recognizes 8th data bit

SW1-6	SW1-7	
Open	Open	Pica (10 chars. per inch)
CLOSED	**OPEN**	**Elite (12 chars. per inch)**
Open	Closed	Ultracondensed (17 chars. per
Closed	Closed	Elite proportional (144 dots pe

SW1-8	
Closed	Adds line feed after every carr return
OPEN	**No line feed after carriage re**

SW2-1	SW2-2	
Open	Open	300 Baud
Closed	Open	1200 Baud
Open	Closed	2400 Baud
CLOSED	**CLOSED**	**9600 Baud**

SW2-3	
OPEN	**Data terminal ready**
Closed	XON/XOFF

SW2-4	
OPEN	**(not used)**

Apple® Imagewriter Character Set

ASCII	Dec	Hex	ASCII	Dec	Hex	ASCII	Dec	Hex	ASCII	Dec	Hex
NUL	00	$ 00	SP	32	$ 20	②*	64	$ 40	⑦*	96	$ 60
SOH	01	$ 01	!	33	$ 21	A	65	$ 41	a	97	$ 61
STX	02	$ 02	"	34	$ 22	B	66	$ 42	b	98	$ 62
ETX	03	$ 03	⓪*	35	$ 23	C	67	$ 43	c	99	$ 63
EOT	04	$ 04	①*	36	$ 24	D	68	$ 44	d	100	$ 64
ENQ	05	$ 05	%	37	$ 25	E	69	$ 45	e	101	$ 65
ACK	06	$ 06	&	38	$ 26	F	70	$ 46	f	102	$ 66
BEL	07	$ 07	'	39	$ 27	G	71	$ 47	g	103	$ 67
BS	08	$ 08	(	40	$ 28	H	72	$ 48	h	104	$ 68
HT	09	$ 09	)	41	$ 29	I	73	$ 49	i	105	$ 69
LF	10	$ 0A	*	42	$ 2A	J	74	$ 4A	j	106	$ 6A
VT	11	$ 0B	+	43	$ 2B	K	75	$ 4B	k	107	$ 6B
FF	12	$ 0C	,	44	$ 2C	L	76	$ 4C	l	108	$ 6C
CR	13	$ 0D	-	45	$ 2D	M	77	$ 4D	m	109	$ 6D
SO	14	$ 0E	.	46	$ 2E	N	78	$ 4E	n	110	$ 6E
SI	15	$ 0F	/	47	$ 2F	O	79	$ 4F	o	111	$ 6F
DLE	16	$ 10	0	48	$ 30	P	80	$ 50	p	112	$ 70
DC1	17	$ 11	1	49	$ 31	Q	81	$ 51	q	113	$ 71
DC2	18	$ 12	2	50	$ 32	R	82	$ 52	r	114	$ 72
DC3	19	$ 13	3	51	$ 33	S	83	$ 53	s	115	$ 73
DC4	20	$ 14	4	52	$ 34	T	84	$ 54	t	116	$ 74
NAK	21	$ 15	5	53	$ 35	U	85	$ 55	u	117	$ 75
SYN	22	$ 16	6	54	$ 36	V	86	$ 56	v	118	$ 76
ETB	23	$ 17	7	55	$ 37	W	87	$ 57	w	119	$ 77
CAN	24	$ 18	8	56	$ 38	X	88	$ 58	x	120	$ 78
EM	25	$ 19	9	57	$ 39	Y	89	$ 59	y	121	$ 79
SUB	26	$ 1A	:	58	$ 3A	Z	90	$ 5A	z	122	$ 7A
ESC	27	$ 1B	;	59	$ 3B	③*	91	$ 5B	⑧*	123	$ 7B
FS	28	$ 1C	<	60	$ 3C	④*	92	$ 5C	⑨*	124	$ 7C
GS	29	$ 1D	=	61	$ 3D	⑤*	93	$ 5D	⑩*	125	$ 7D
RS	30	$ 1E	>	62	$ 3E	⑥*	94	$ 5E	⑪*	126	$ 7E
US	31	$ 1F	?	63	$ 3F	-	95	$ 5F	DEL	127	$ 7F

Note: The reference symbol ◯* refers to the Apple Imagewriter Extended Character Set table below for Alternate (National Languages):

Apple Imagewriter Alternate Character Set (For National Languages)

Reference Number	0	1	2	3	4	5	6	7	8	9	10	11
Hexadecimal	$ 23	$ 24	$ 40	$ 5B	$ 5C	$ 5D	$ 5E	$ 60	$ 7B	$ 7C	$ 7D	$ 7E
American	#	$	@	[	\	]	^	`	{	|	}	~
British	£	$	@	[	\	]	^	`	{	|	}	~
German	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
French	£	$	à	°	ç	§	^	`	é	ù	è	¨
Swedish	#	$	@	Ä	Ö	Å	^	`	ä	ö	å	~
Italian	£	$	§	°	ç	é	^	ù	à	ò	è	ì
Spanish	£	$	§	¡	Ñ	¿	^	`	°	ñ	ç	~

DIP Switch Settings

The normal position of DIP switches SW1 and SW2 on the Imagewriter are as indicated in **boldfaced capital letters.**

SW1-1	SW1-2	SW1-3	
OPEN	**OPEN**	**OPEN**	**American**
Closed	Closed	Open	British
Open	Open	Closed	German
Open	Closed	Closed	French
Closed	Open	Closed	Swedish
Closed	Open	Open	Italian
Closed	Closed	Closed	Spanish
Open	Closed	Open	American

SW1-4	
OPEN	**Page Length: 66 lines**
Closed	Page Length: 72 lines

SW1-5	
CLOSED	**Ignores 8th data bit**
Open	Recognizes 8th data bit

SW1-6	SW1-7	
Open	Open	Pica (10 chars. per inch)
CLOSED	**OPEN**	**Elite (12 chars. per inch)**
Open	Closed	Ultracondensed (17 chars. per
Closed	Closed	Elite proportional (144 dots pe

SW1-8	
Closed	Adds line feed after every car return
OPEN	**No line feed after carriage r**

SW2-1	SW2-2	
Open	Open	300 Baud
Closed	Open	1200 Baud
Open	Closed	2400 Baud
CLOSED	**CLOSED**	**9600 Baud**

SW2-3	
OPEN	**Data terminal ready**
Closed	XON/XOFF

SW2-4	
OPEN	**(not used)**

Code	Decimal	Hex	Effect
ESC L nnn	27 76 ddd	$1B $4C hhh	Sets left margin to position nnn
CTL-L	12	$0C	Feeds paper to next top of form
ESC v	27 118	$1B $76	Sets TOF to current position
ESC O	27 79	$1B $4F	Paper error detector off
ESC o	27 111	$1B $6F	Paper error detector on
ESC Z@ CTL-@	27 90 64 0	$1B $5A $40 $0	End-of-line at CR only
ESC D@ CTL-@	27 68 64 0	$1B $44 $40 $0	End-of-line at CR, VT, FF, HT, CONTROL-__
CTL-X	24	$18	Cancels all unprinted text
ESC Z __CTL-@	27 90 32 0	$1B $5A $20 $0	No line feed after auto-print (__ = space character)
ESCD __CTL-@__	27 68 32 0	$1B $44 $20 $0	Line feed after auto-print (__ = space character)
ESC D CTL-@__	27 68 0 32	$1B $44 $00 $20	Ignores eighth bit of data byte
ESC Z CTL-@__	27 90 0 32	$1B $5A $00 $20	Recognizes eighth bit of data byte
ESC c	27 99	$1B $63	Restores standard instructions (Software Reset)

Tabbing Control Codes

Code	Decimal	Hex	Effect
ESC (a,b,——n.	27 40 d1,d2,——	$1B $28 h1,h2,——	Sets horizontal tab line
ESC u	27 117	$1B $75	Sets horizontal tab in addition to those tabs already set (only one additional tab can be set in any one operation)
ESC) a,b,——n.	27 41 d1,d2,——	$1B $29 h1,h2,——	Clears selected horizontal tabs
ESC 0	27 48	$1B $30	Clears all tabs
CTL-I	9	$09	Goes to next tab
CTL-]A@	29 65 64	$1D $41 $40	Sets starting top of form (TOF)
C@	67 64	$43 $40	Sets bottom of form (BOF)
A@ CTL-	65 64 30	$41 $40 $1E	Sets TOF of next form
CTL-__ B	31 66	$1F $42	Drops to next tab B
CTL-__ C	31 67	$1F $43	Drops to next tab C
CTL-__ D	31 68	$1F $44	Drops to next tab D
CTL-__ E	31 69	$1F $45	Drops to next tab E
CTL-__ F	31 70	$1F $46	Drops to next tab F
CTL-__ A	31 65	$1F $41	Drops to next BOF or TOF
CTL-L	12	$0C	Drops to next TOF
GS Ø	29 48	$1D $30	Sets vertical tabbing to power-on status, and sets TOF to current paper position

Custom Character Control Codes

Code	Decimal	Hex	Effect
ESC -	27 45	$1B $2D	Maximum width will be 8 dots
ESC +	27 43	$1B $2B	Maximum width will be 16 dots
ESC I	27 73	$1B $49	Starts loading new character(s)
CTL-D	4	$04	Ends new character(s) loading
A.....P	65...80	$41...$50	Width code when using top 8 wires (A = 1 ... P = 16)
a.....p	97..112	$61...$70	Width code when using bottom 8 wires (a = 1 ... p = 16)
ESC '	27 39	$1B $27	Switches to custom character font
ESC *	27 42	$1B $2A	Switches to custom character font (high ASCII values)
ESC $	27 36	$1B $24	Switches back to normal font

Graphics Control Codes

Code	Decimal	Hex	Effect
ESC G nnnn	27 71 dddd	$1B $47 hhhh	Prints graphics columns corresponding to the following nnnn data bytes
ESC S nnnn	27 83 dddd	$1B $53 hhhh	Same as ESCAPE G
ESC g nnn	27 103 ddd	$1B $67 hhh	Prints line corresponding to the following nnn x 8 data bytes
ESC V nnnn c	27 86 dddd d	$1B $56 hhhh h	Prints nnnn repetitions of the dot column specified by c
ESC F nnnn	27 70 dddd	$1B $46 hhhh	Places succeeding printing nnnn dot positions from left margin

ESC L nnn	27 76 ddd	$1B $4C hhh	Sets left margin to position nnn
CTL-L	12	$0C	Feeds paper to next top of form
ESC v	27 118	$1B $76	Sets TOF to current position
ESC O	27 79	$1B $4F	Paper error detector off
ESC o	27 111	$1B $6F	Paper error detector on
ESC Z@ CTL-@	27 90 64 0	$1B $5A $40 $0	End-of-line at CR only
ESC D@ CTL-@	27 68 64 0	$1B $44 $40 $0	End-of-line at CR, VT, FF, HT, CONTROL-__
CTL-X	24	$18	Cancels all unprinted text
ESC Z __CTL-@	27 90 32 0	$1B $5A $20 $0	No line feed after auto-print (__ = space character)
ESCD __CTL-@__	27 68 32 0	$1B $44 $20 $0	Line feed after auto-print (__ = space character)
ESC D CTL-@__	27 68 0 32	$1B $44 $00 $20	Ignores eighth bit of data byte
ESC Z CTL-@__	27 90 0 32	$1B $5A $00 $20	Recognizes eighth bit of data byte
ESC c	27 99	$1B $63	Restores standard instructions (Software Reset)

Tabbing Control Codes

Code	Decimal	Hex	Effect
ESC (a,b,——n.	27 40 d1,d2,——	$1B $28 h1,h2,——	Sets horizontal tab line
ESC u	27 117	$1B $75	Sets horizontal tab in addition to those tabs already set (only one additional tab can be set in any one operation)
ESC) a,b,——n.	27 41 d1,d2,——	$1B $29 h1,h2,——	Clears selected horizontal tabs
ESC 0	27 48	$1B $30	Clears all tabs
CTL-I	9	$09	Goes to next tab
CTL-]A@	29 65 64	$1D $41 $40	Sets starting top of form (TOF)
C@	67 64	$43 $40	Sets bottom of form (BOF)
A@ CTL-	65 64 30	$41 $40 $1E	Sets TOF of next form
CTL-__ B	31 66	$1F $42	Drops to next tab B
CTL-__ C	31 67	$1F $43	Drops to next tab C
CTL-__ D	31 68	$1F $44	Drops to next tab D
CTL-__ E	31 69	$1F $45	Drops to next tab E
CTL-__ F	31 70	$1F $46	Drops to next tab F
CTL-__ A	31 65	$1F $41	Drops to next BOF or TOF
CTL-L	12	$0C	Drops to next TOF
GS 0	29 48	$1D $30	Sets vertical tabbing to power-on status, and sets TOF to current paper position

Custom Character Control Codes

Code	Decimal	Hex	Effect
ESC -	27 45	$1B $2D	Maximum width will be 8 dots
ESC +	27 43	$1B $2B	Maximum width will be 16 dots
ESC I	27 73	$1B $49	Starts loading new character(s)
CTL-D	4	$04	Ends new character(s) loading
A.....P	65...80	$41...$50	Width code when using top 8 wires (A = 1 ... P = 16)
a.....p	97..112	$61...$70	Width code when using bottom 8 wires (a = 1 ... p = 16)
ESC '	27 39	$1B $27	Switches to custom character font
ESC *	27 42	$1B $2A	Switches to custom character font (high ASCII values)
ESC $	27 36	$1B $24	Switches back to normal font

Graphics Control Codes

Code	Decimal	Hex	Effect
ESC G nnnn	27 71 dddd	$1B $47 hhhh	Prints graphics columns corresponding to the following nnnn data bytes
ESC S nnnn	27 83 dddd	$1B $53 hhhh	Same as ESCAPE G
ESC g nnn	27 103 ddd	$1B $67 hhh	Prints line corresponding to the following nnn x 8 data bytes
ESC V nnnn c	27 86 dddd d	$1B $56 hhhh h	Prints nnnn repetitions of the dot column specified by c
ESC F nnnn	27 70 dddd	$1B $46 hhhh	Places succeeding printing nnnn dot positions from left margin

er

Dec	Hex
96	$ 60
97	$ 61
98	$ 62
99	$ 63
100	$ 64
101	$ 65
102	$ 66
103	$ 67
104	$ 68
105	$ 69
106	$ 6A
107	$ 6B
108	$ 6C
109	$ 6D
110	$ 6E
111	$ 6F
112	$ 70
113	$ 71
114	$ 72
115	$ 73
116	$ 74
117	$ 75
118	$ 76
119	$ 77
120	$ 78
121	$ 79
122	$ 7A
123	$ 7B
124	$ 7C
125	$ 7D
126	$ 7E
127	$ 7F

r Set table below

10	11
$ 7D	$ 7E

The normal position of DIP switches SW1 and SW2 on the Imagewriter are as indicated in boldfaced capital letters.

SW1-1	SW1-2	SW1-3	
OPEN	**OPEN**	**OPEN**	**American**
Closed	Closed	Open	British
Open	Open	Closed	German
Open	Closed	Closed	French
Closed	Open	Closed	Swedish
Closed	Open	Open	Italian
Closed	Closed	Closed	Spanish
Open	Closed	Open	American

SW1-4	
OPEN	**Page Length: 66 lines**
Closed	Page Length: 72 lines

SW1-5	
CLOSED	**Ignores 8th data bit**
Open	Recognizes 8th data bit

SW1-6	SW1-7	
Open	Open	Pica (10 chars. per inch)
CLOSED	**OPEN**	**Elite (12 chars. per inch)**
Open	Closed	Ultracondensed (17 chars. per inch)
Closed	Closed	Elite proportional (144 dots per inch)

SW1-8	
Closed	Adds line feed after every carriage return
OPEN	**No line feed after carriage return**

SW2-1	SW2-2	
Open	Open	300 Baud
Closed	Open	1200 Baud
Open	Closed	2400 Baud
CLOSED	**CLOSED**	**9600 Baud**

SW2-3	
OPEN	**Data terminal ready**
Closed	XON/XOFF

SW2-4	
OPEN	**(not used)**

Code	Decimal	Hex	Effect
ESC n	27 110	$1B $6E	Exte d (9 characters per inch)
ESC N	27 78	$1B $4E	Pica (10 characters per inch)
ESC E	27 69	$1B $45	Elite (12 characters per inch)
ESC p	27 112	$1B $70	Pica proportional
ESC P	27 80	$1B $50	Elite proportional
ESC e	27 101	$1B $65	Semicondensed (13.4 characters per inch)
ESC q	27 113	$1B $71	Condensed (15 characters per inch)
ESC Q	27 81	$1B $51	Ultracondensed (17 characters per inch)
ESC _ n	27 d	$1B $h	Sets n dots between proportional characters (n = 1 to 6)
ESC s _ n	27 115 d	$1B $73 $h	Sets spacing between all characters in proportional mode to n dots (n = 0 to 9)
ESC R nnn c	27 82 ddd d	$1B $52 hhh h	Prints nnn repetitions of character c
CTL-Hc	8 d	$08 h	Backspaces one character and prints the character c
ESC X	27 88	$1B $58	Starts underlining text
ESC Y	27 89	$1B $59	Stops underlining text
ESC !	27 33	$1B $21	Starts boldface printing
ESC "	27 34	$1B $22	Ends boldface printing
CTL-N	14	$0E	Begins headline mode
CTL-O	15	$0F	Ends headline mode
ESC >	27 62	$1B $3E	Left-to-right printing only
ESC <	27 60	$1B $3C	Bidirectional printing
ESC A	27 65	$1B $41	6 lines per inch
ESC B	27 66	$1B $42	8 lines per inch
ESC I 1	27 108 49	$1B $6C $31	Enables optional line feed function
ESC I 0	27 108 48	$1B $6C $30	Disables optional line feed function
ESC T nn	27 84 dd	$1B $54 hh	Distance between lines to be nn/144 inch (nn = 01 to 99)
ESC f	27 102	$1B $66	Forward (normal) line feeding
ESC r	27 114	$1B $72	Reverse line feeding
CTL-_n	31 d	$1F h	Feeds n lines of blank paper (n = 1,2,3,4,5,6,7,8,9,:,;,,<,=,>,?)

er

Dec	Hex
96	$ 60
97	$ 61
98	$ 62
99	$ 63
100	$ 64
101	$ 65
102	$ 66
103	$ 67
104	$ 68
105	$ 69
106	$ 6A
107	$ 6B
108	$ 6C
109	$ 6D
110	$ 6E
111	$ 6F
112	$ 70
113	$ 71
114	$ 72
115	$ 73
116	$ 74
117	$ 75
118	$ 76
119	$ 77
120	$ 78
121	$ 79
122	$ 7A
123	$ 7B
124	$ 7C
125	$ 7D
126	$ 7E
127	$ 7F

Set table below

10	11
$ 7D	$ 7E
}	~
}	~
ü	ß
è	¨
â	~
è	ì
c	~

The normal position of DIP switches SW1 and SW2 on the Imagewriter are as indicated in boldfaced capital letter

SW1-1	SW1-2	SW1-3	
OPEN	**OPEN**	**OPEN**	**American**
Closed	Closed	Open	British
Open	Open	Closed	German
Open	Closed	Closed	French
Closed	Open	Closed	Swedish
Closed	Open	Open	Italian
Closed	Closed	Closed	Spanish
Open	Closed	Open	American

SW1-4	
OPEN	**Page Length: 66 lines**
Closed	Page Length: 72 lines

SW1-5	
CLOSED	**Ignores 8th data bit**
Open	Recognizes 8th data bit

SW1-6	SW1-7	
Open	Open	Pica (10 chars. per inch)
CLOSED	**OPEN**	**Elite (12 chars. per inch)**
Open	Closed	Ultracondensed (17 chars. per inch)
Closed	Closed	Elite proportional (144 dots per inch)

SW1-8	
Closed	Adds line feed after every carriage return
OPEN	**No line feed after carriage return**

SW2-1	SW2-2	
Open	Open	300 Baud
Closed	Open	1200 Baud
Open	Closed	2400 Baud
CLOSED	**CLOSED**	**9600 Baud**

SW2-3	
OPEN	**Data terminal ready**
Closed	XON/XOFF

SW2-4	
OPEN	**(not used)**

Code	Decimal	Hex	Effect
ESC n	27 110	$1B $6E	Extended (9 characters per inch)
ESC N	27 78	$1B $4E	Pica (10 characters per inch)
ESC E	27 69	$1B $45	Elite (12 characters per inch)
ESC p	27 112	$1B $70	Pica proportional
ESC P	27 80	$1B $50	Elite proportional
ESC e	27 101	$1B $65	Semicondensed (13.4 characters per inch)
ESC q	27 113	$1B $71	Condensed (15 characters per inch)
ESC Q	27 81	$1B $51	Ultracondensed (17 characters per inch)
ESC _ n	27 d	$1B $h	Sets n dots between proportional characters (n = 1 to 6)
ESC s _ n	27 115 d	$1B $73 $h	Sets spacing between all characters in proportional mode to n dots (n = 0 to 9)
ESC R nnn c	27 82 ddd d	$1B $52 hhh h	Prints nnn repetitions of character c
CTL-Hc	8 d	$08 h	Backspaces one character and prints the character c
ESC X	27 88	$1B $58	Starts underlining text
ESC Y	27 89	$1B $59	Stops underlining text
ESC !	27 33	$1B $21	Starts boldface printing
ESC "	27 34	$1B $22	Ends boldface printing
CTL-N	14	$0E	Begins headline mode
CTL-O	15	$0F	Ends headline mode
ESC >	27 62	$1B $3E	Left-to-right printing only
ESC <	27 60	$1B $3C	Bidirectional printing
ESC A	27 65	$1B $41	6 lines per inch
ESC B	27 66	$1B $42	8 lines per inch
ESC I 1	27 108 49	$1B $6C $31	Enables optional line feed function
ESC I 0	27 108 48	$1B $6C $30	Disables optional line feed function
ESC T nn	27 84 dd	$1B $54 hh	Distance between lines to be nn/144 inch (nn = 01 to 99)
ESC f	27 102	$1B $66	Forward (normal) line feeding
ESC r	27 114	$1B $72	Reverse line feeding
CTL-_n	31 d	$1F h	Feeds n lines of blank paper (n=1 2 3 4 5 6 7 8 9 : ; < = > ?)

Apple® Imagewriter Character Set

ASCII	Dec	Hex	ASCII	Dec	Hex	ASCII	Dec	Hex	ASCII	Dec	Hex
NUL	00	$ 00	SP	32	$ 20	②*	64	$ 40	⑦*	96	$ 60
SOH	01	$ 01	!	33	$ 21	A	65	$ 41	a	97	$ 61
STX	02	$ 02	"	34	$ 22	B	66	$ 42	b	98	$ 62
ETX	03	$ 03	⓪*	35	$ 23	C	67	$ 43	c	99	$ 63
EOT	04	$ 04	①*	36	$ 24	D	68	$ 44	d	100	$ 64
ENQ	05	$ 05	%	37	$ 25	E	69	$ 45	e	101	$ 65
ACK	06	$ 06	&	38	$ 26	F	70	$ 46	f	102	$ 66
BEL	07	$ 07	'	39	$ 27	G	71	$ 47	g	103	$ 67
BS	08	$ 08	(	40	$ 28	H	72	$ 48	h	104	$ 68
HT	09	$ 09	)	41	$ 29	I	73	$ 49	i	105	$ 69
LF	10	$ 0A	*	42	$ 2A	J	74	$ 4A	j	106	$ 6A
VT	11	$ 0B	+	43	$ 2B	K	75	$ 4B	k	107	$ 6B
FF	12	$ 0C	,	44	$ 2C	L	76	$ 4C	l	108	$ 6C
CR	13	$ 0D	-	45	$ 2D	M	77	$ 4D	m	109	$ 6D
SO	14	$ 0E	.	46	$ 2E	N	78	$ 4E	n	110	$ 6E
SI	15	$ 0F	/	47	$ 2F	O	79	$ 4F	o	111	$ 6F
DLE	16	$ 10	0	48	$ 30	P	80	$ 50	p	112	$ 70
DC1	17	$ 11	1	49	$ 31	Q	81	$ 51	q	113	$ 71
DC2	18	$ 12	2	50	$ 32	R	82	$ 52	r	114	$ 72
DC3	19	$ 13	3	51	$ 33	S	83	$ 53	s	115	$ 73
DC4	20	$ 14	4	52	$ 34	T	84	$ 54	t	116	$ 74
NAK	21	$ 15	5	53	$ 35	U	85	$ 55	u	117	$ 75
SYN	22	$ 16	6	54	$ 36	V	86	$ 56	v	118	$ 76
ETB	23	$ 17	7	55	$ 37	W	87	$ 57	w	119	$ 77
CAN	24	$ 18	8	56	$ 38	X	88	$ 58	x	120	$ 78
EM	25	$ 19	9	57	$ 39	Y	89	$ 59	y	121	$ 79
SUB	26	$ 1A	:	58	$ 3A	Z	90	$ 5A	z	122	$ 7A
ESC	27	$ 1B	;	59	$ 3B	③*	91	$ 5B	⑧*	123	$ 7B
FS	28	$ 1C	<	60	$ 3C	④*	92	$ 5C	⑨*	124	$ 7C
GS	29	$ 1D	=	61	$ 3D	⑤*	93	$ 5D	⑩*	125	$ 7D
RS	30	$ 1E	>	62	$ 3E	⑥*	94	$ 5E	⑪*	126	$ 7E
US	31	$ 1F	?	63	$ 3F	-	95	$ 5F	DEL	127	$ 7F

Note: The reference symbol ◯* refers to the Apple Imagewriter Extended Character Set table below for Alternate (National Languages):

Apple Imagewriter Alternate Character Set (For National Languages)

Reference Number	0	1	2	3	4	5	6	7	8	9	10	11
Hexadecimal	$ 23	$ 24	$ 40	$ 5B	$ 5C	$ 5D	$ 5E	$ 60	$ 7B	$ 7C	$ 7D	$ 7E
American	#	$	@	[	\	]	^	`	{	|	}	~
British	£	$	@	[	\	]	^	`	{	|	}	~
German	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
French	£	$	à	°	Ç	§	^	`	é	ù	è	¨
Swedish	#	$	@	Ä	Ö	Å	^	`	ä	ö	å	~
Italian	£	$	§	°	Ç	é	^	ù	à	ò	è	ì

DIP Switch Settings

The normal position of DIP ıtches SW1 and SW2 o Imagewriter are as indicated in boldfaced capital lette

SW1-1	SW1-2	SW1-3	
OPEN	**OPEN**	**OPEN**	**Am**
Closed	Closed	Open	Briti
Open	Open	Closed	Gerı
Open	Closed	Closed	Frer
Closed	Open	Closed	Swe
Closed	Open	Open	Italiz
Closed	Closed	Closed	Spa
Open	Closed	Open	Ame

SW1-4	
OPEN	**Page Length: 66 lines**
Closed	Page Length: 72 lines

SW1-5	
CLOSED	**Ignores 8th data bit**
Open	Recognizes 8th data bit

SW1-6	SW1-7	
Open	Open	Pica (10 chars. per inch)
CLOSED	**OPEN**	**Elite (12 chars. per inch**
Open	Closed	Ultracondensed (17 chars
Closed	Closed	Elite proportional (144 do

SW1-8	
Closed	Adds line feed after every return
OPEN	**No line feed after carria**

SW2-1	SW2-2	
Open	Open	300 Baud
Closed	Open	1200 Baud
Open	Closed	2400 Baud
CLOSED	**CLOSED**	**9600 Baud**

SW2-3	
OPEN	**Data terminal ready**
Closed	XON/XOFF

SW2-4	
OPEN	**(not used)**

SW 1 SWITCH SETTINGS

SWITCH	NORMAL SETTING	PURPOSE
1	OPEN	Switches 1-3 select which set of national characters will be printed.
2	CLOSED	If you set the switches to OPEN, CLOSED, OPEN, the printer will print
3	OPEN	United States characters.
4	OPEN	Switch 4 selects paper length. Set the switch to OPEN for paper that is 11 inches long. (66 lines)
5	OPEN	Switch 5 determines if a host computer can put the printer on-line and off-line. If you set the switch to OPEN, the host computer will have this capability.
6	OPEN	The computer sends characters to the printer. Sometimes the printer stores these characters without receiving a command to print them. When the printer's memory is full, it can do one of two things when it receives a print command. 1) It can go to a new line on the page and begin printing. 2) It can print from wherever the print head is at the time the print command is received. Normally, you want the printer to start where it left off, so set switch 6 to OPEN.
7	CLOSED	The computer tells the printer to start printing by sending a print command. There are a number of print commands. They include Carriage Return, Linefeed, Vertical Tab, and Formfeed characters. Normally, you want any of these characters to start printing. So set Switch 7 to CLOSED. If Switch 7 is set to OPEN, only a Carriage Return character will start printing.
8	OPEN	If the host computer sends a Linefeed following the Carriage Return, set switch to OPEN. If host does not send the Linefeed, the printer will add a Linefeed when switch is CLOSED.

8. When you finish setting the switches, make sure SW 1 looks like this:

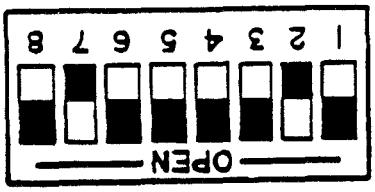


FIGURE 8

9. Using a small screwdriver, set all SW 2 switches to OPEN.

10. Using the chart on the next page, set all SW 2 switches to their normal setting.

SW 2 SWITCH SETTINGS

SWITCH	NORMAL SETTING	PURPOSE
1	CLOSED	The number zero can be printed with a slash through it. This way the user won't confuse it with the letter O. Set the switch to CLOSED to print slashed zeroes.
2	OPEN	This switch determines the size of the printer's memory. To get the largest memory possible, set this switch to OPEN. CLOSED is only 1 line buffer.
3	Not Used	The printer doesn't use these switches.
4	Not Used	It doesn't matter if they are OPEN or CLOSED.
5	CLOSED	Set to OPEN for 10 characters per each inch regardless of the size of each character. Set to CLOSED to have the printer adjust spacing for character size. Other print modes are software selectable.
6	CLOSED/ OPEN	This switch tells the printer to expect either a 7-bit or 8-bit data from the computer. If you're using an interface that uses 7-bit data, set it to CLOSED. If you're using an 8-bit interface, set it to OPEN.
7	CLOSED	If this switch is set to CLOSED, the printer will be automatically on-line (SEL LIGHT) whenever it is turned on. If you want the printer to be off-line, (NOT SEL) however, set it to OPEN.
8	OPEN	If this switch is set to OPEN, the printer will be able to print in both directions. If you set it to CLOSED, the printer will only be able to print from left to right.

11. When you finish setting the switches, make sure SW 2 looks like this:

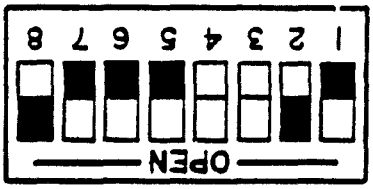


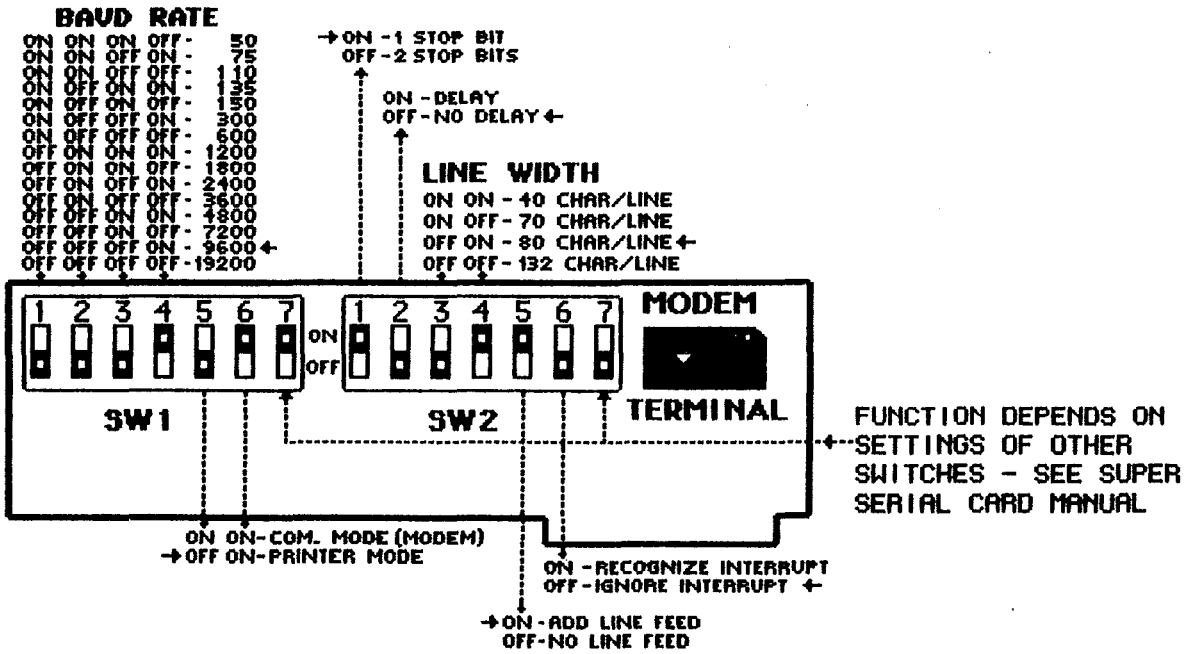
FIGURE 9

12. Push the plastic strip back over the switches.

13. Replace the carrier cover.

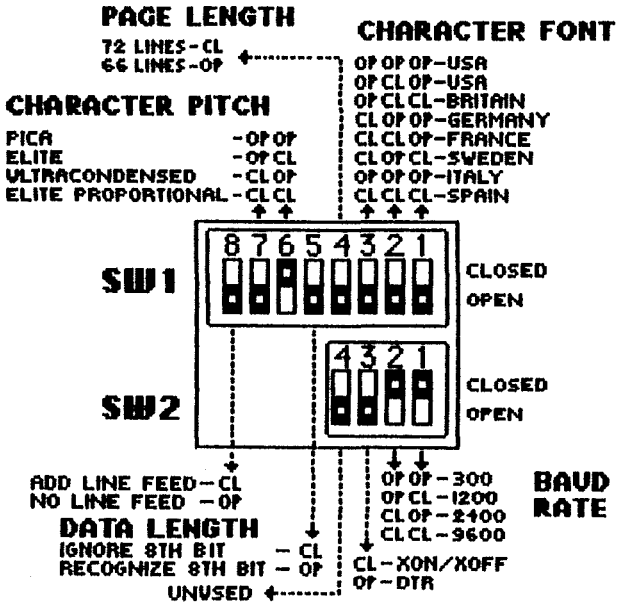
14. Run the self test.

DIP SWITCH FUNCTIONS #1



Super Serial Card

switches are shown in most commonly used positions (exception: For Apple //e, Imagewriter switch 1-5 should be set to closed position)



Imagewriter Printer

Imagewriter Configuration